



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/615,559	07/08/2003	Ricardo Te Lim	VP071	9014
20178	7590	10/20/2005	EXAMINER	
EPSON RESEARCH AND DEVELOPMENT INC INTELLECTUAL PROPERTY DEPT 150 RIVER OAKS PARKWAY, SUITE 225 SAN JOSE, CA 95134			TUNG, KEE M	
			ART UNIT	PAPER NUMBER
			2671	

DATE MAILED: 10/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/615,559

Applicant(s)

LIM, RICARDO TE

Examiner

Kee M. Tung

Art Unit

2671

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 6-9 and 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhu (5,423,009) and Rinaldi et al (6,327,002 hereinafter "Rinaldi") in view of Zeidler et al (US 2003/0001970 hereinafter "Zeidler").

Zhu teaches a graphics controller (graphics coprocessor 11) providing for flexible access to a graphics display device (not shown, but is inherent by any well known computer system to include) by a host (17) comprising an input bus (18) for coupling to an output bus of the host; an output bus (not shown, but inherently would have to connect to the graphics coprocessor 11) for coupling to the graphics display device (not shown, but inherent to connect to the graphics coprocessor 11 via an output bus); the graphics coprocessor includes a video processing circuit (15) having an input coupled to the input bus of the graphics coprocessor and an output coupled to the output bus of the graphics coprocessor; and a bypass switching circuit (not shown. Zhu teaches a bypass path from input bus of the graphics accelerator 15 to the memory control 21) adapted to switchably coupled the input bus of the graphics controller to the output bus of the graphics controller so as to bypass said video processing circuit. Rinaldi teaches a video signal processing system (Fig. 1) comprising a host (CPU 16) and a display

Art Unit: 2671

device (14) connects directly to a video graphics card (12); and the video graphics card (12) includes a graphics controller 24 directly connected to the CPU 16 (without any of the I/F circuits as shown in Zhu) and display 14 and the graphics controller 24 also can be bypass if the input video data (28) does not required processed by the graphics controller 24 and the data can be directly forward to video out (30 or 32) to another display device (such as, a TV). It is also noted that Rinaldi also teaches more detail of the graphics card 12 than the present application, such as, additionally elements of video decoder 20, video encode 22, output control 21, DAC 23 and an embedded frame buffer 26. It would have been obvious to one of ordinary skill in the art at the time the present invention was made to combine the teachings of connecting a display device to the graphics controller 24 of Rinaldi into the system of Zhu in order to for the video graphics system to send data to the display device more directly and efficiently, and thus to increase the graphics system performance. However, the combined system fails to explicitly teach or suggest a bypass switching circuit. This is what Zeidler teaches (Fig. 1, 24). Zeidler teaches a graphics subsystem bypass apparatus (Fig. 1) comprising an OSD graphics subsystem (40) connects to receive input analog and/or digital video ; a graphics bypass switch (24) for outputting video data via a bypass path 22 or output from OSD graphics subsystem (40); a microprocessor (26) controls overall system includes the bypass switch (24). It would have been obvious to one of ordinary skill in the art at the time the present invention was made to combine the teachings of a bypass switch 24 of Zeidler into the combined system of Zhu and Rinaldi in order to selective output or connect input bus to the output bus without the through the

Art Unit: 2671

unnecessary graphics/video processing circuit and thus increase the overall performance of the system. Therefore, at least claim 1 would have been obvious.

As per claim 2, Rinaldi teaches a camera interface (col. 1, lines 24-26, for interfacing with camcorders) for interfacing a camera to said video processing circuit.

As per claim 3, Rinaldi teaches the graphics display device includes one or more LCD panels (col. 2, lines 33-34).

As per claim 12, Zeidler teaches a select input for receiving a signal for open and closing said bypass switching circuit (control signal from microprocessor 26).

Claims 6-9 are similar in scope to claims 1-3, and thus are rejected under similar rationale.

Claims 13-15 are similar in scope to claims 1, 2 and 12, and thus are rejected under similar rationale.

3. Claims 4, 5, 10, 11, 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zhu (5,423,009) and Rinaldi et al (6,327,002 hereinafter "Rinaldi") in view of Zeidler et al (US 2003/0001970 hereinafter "Zeidler") as applied to claims 1, 3, 6, 9 and 13 above, and further in view of Fujimoto (5,479,183) and Clark (5,949,437).

The teachings of Zhu and Rinaldi are given in previous paragraph of this Office action. However, the combined system fails to explicitly teach or suggest a plurality of LCD panels and selecting one of the LCD panels. This is what Fujimoto and Clark teaches. Fujimoto teaches a computer display system (Fig. 1) comprising a display controller (24) selects one of the pluralities of displays (a LCD 37 and a CRT 49). Clark teaches a plurality of displays and the displays can be of the same type and may be

either analog or digital (col. 4, lines 45-48 and Figs. 1-4). It would have been obvious to one of ordinary skill in the art at the time the present invention was made to combine the teachings of plurality of displays of Fujimoto and Clark into the single display system of Zhu and Rinaldi because plural displays provide to selectively connect to various optional displays as taught by Fujimoto and further provides options for using same or different type of displays as implement by Clark (Figs. 1-4). Therefore, at least claims 4-5, 10-11 and 16-17 would have been obvious.

Response to Arguments

4. Applicant's arguments filed 8/15/05 have been fully considered but they are not persuasive.

Applicant's arguments regarding a bypass switching circuit are mooted in view of the newly added prior art.

Regarding prior art to Zhu, applicant argues that Zhu teaches additional elements, a bus I/F 25 and host I/F 23 within the graphics coprocessor 11 where the present invention doesn't required. However, Rinaldi suggests, such I/F circuits can be eliminated (as shown in Fig. 1, there is no I/F circuits in between the CPU 16 and the graphics controller 24). Therefore, applicant's arguments are not deemed to be persuasive.

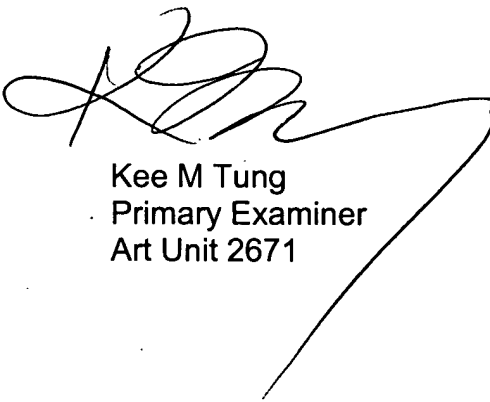
Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kee M. Tung whose telephone number is 571-272-7794. The examiner can normally be reached on Tuesday - Friday from 5:30 am - 4:00 pm.

Art Unit: 2671

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ulka Chauhan can be reached on 571-272-7782. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kee M Tung
Primary Examiner
Art Unit 2671